Museum has been built, fitted, and furnished, and that by which it is maintained in full efficiency, has been annually voted by Parliament, and generous benefactors have given priceless collections to it on the express understanding that the museum is—by Act of Parliament—a permanent national possession daily open to the public. It is, of course, understood that the Trustees may close it on certain days for administrative purposes, and in case of national disaster the Government would be justified in suspending all expenditure upon it. But the endeavour to save a minute fraction of the annual cost of the museum by hastily closing its doors in its owner's face, must lead to public resentment and want of confidence in the Trustees, who alone (and not the Government) are by Act of Parliament distinctly charged with the public duty of keeping it open. As a consequence there might very probably be a resistance in Parliament to the passing of the annual grant by which the museum is maintained, and the good work done there might be curtailed or brought to an end.

It has long been the policy of those who have duly understood the position of the Natural History Museum to give every facility and every assistance to the public in the use and enjoyment of its contents. It was the main care of Sir William Flower when director to make the galleries both delightful and really educative. In that respect I, in my turn, followed him, and recognised as a fundamental principle of administration that the public must be enabled, in every possible way, to understand and to enjoy the great museum for which it pays. That is no more than a fair and honourable acknowledgment to the taxpayer of the large sums which his Parliamentary representatives (quite independently of the Government of the day) place in the hands of the staff of the museum for the purpose of scientific research and discovery and the maintenance of the museum as a centre of study and expert advice. It is only by securing for it the intelligent interest and appreciation of the public that the Natural History Museum can be assured of the continuance of its annual subsidy. That view, I may say, was one which was often expressed to me by our late King Edward, when, as Prince of Wales, he was a trustee of the museum. It seems to me that to shut the public out of its museum in order to spare expenditure on the wages of a few superannuated soldiers as watchmen, would be to give public offence without any prospect of compensating advantage, and I therefore venture to hope that the proposal to do so may be reconsidered.

An error, for which we were not responsible, crept into the figures of attendance at the Colchester Corporation Museum, to which we alluded last week. The week-day figures for the last nine months of 1915 were 39,933. But, even so, the numbers seem to have been quite double those of ordinary years.

NOTES.

WE announce with deep regret the death on February 15, in his eighty-fifth year, of Sir William Turner, K.C.B., F.R.S., principal and vice-chancellor of the University of Edinburgh.

WE see with much regret the announcement, in the *Times* of February 11, of the death of Prof. I. P. Pavlov, a foreign member of the Royal Society, late professor of physiology in the University of St. Petersburg, and director of the Imperial Institute for Experimental Medicine.

SIR E. VINCENT EVANS has been appointed chairman of the Royal Commission on Ancient Monuments in Wales and Monmouthshire, in succession to the late Sir John Rhys.

THE death is announced, in his sixtieth year, of Dr. J. O. Reed, who had been connected with the University of Michigan since 1892, as successively, instructor, assistant professor, and professor of physics. He was the author of a text-book of "College Physics," and, with the late Prof. K. E. Guthe, of a "Manual of Physical Measurements."

ACCORDING to the *British Medical Journal,* the foundation-stone of the Hospital for Tropical Diseases of the Calcutta School of Tropical Medicine will be laid on February 24 by Lord Carmichael, the Governor of Bengal. We learn from our contemporary that the whole of the money required for the building has now been collected.

AT the meeting of the Prehistoric Society of East Anglia on February 7 Mr. J. Reid Moir read a paper on Palæolithic implements found at Darmsden, Suffolk, in a high-level plateau deposit. Some are choppers or scrapers, while others appear to have been used as borers. All have been made from Lower Eocene pebbles, and appear to represent a hitherto unrecognised type.

AMONG the goods of which the import is prohibited by a Proclamation to come into force on March 1, are:—All materials for the manufacture of paper, including wood pulp, esparto grass, and linen and cotton rags; paper and cardboard (including strawboard, pasteboard, millboard, and wood pulp board), and manufactures of paper and cardboard; and all periodical publications exceeding 16 pages in length, imported otherwise than in single copies through the post.

THE committee of the Privy Council for Scientific and Industrial Research has appointed the Hon. Sir C. A. Parsons, K.C.B., F.R.S., to be a member of the Advisory Council in place of Prof. B. Hopkinson, F.R.S., who has been forced to resign by the pressure of his military duties and special work connected with the war. The committee has also appointed Prof. J. F. Thorpe, F.R.S., to fill the vacancy on the Advisory Council caused by the death of Prof. Raphael Meldola, F.R.S.

ACCORDING to the Cape Town correspondent of the *Times* (February 11), the Rand has been subject to a series of earth-tremors, which have lately been increasing in frequency and strength. A committee appointed to investigate them has issued a reassuring report. The shocks, it appears, are purely local, being the result of mining operations, and therefore unlikely ever to be of a destructive character. They seem to resemble the earth-shakes which are not uncommon in the mining districts of this country, and are probably due to small movements along faults precipitated by the withdrawal of coal or water.

THE *Nieuwe Courant* of February 3 announces the death, from heart failure, of Dr. August Michaelis, professor of chemistry in the University of Rostock.

Dr. Michaelis published numerous papers on organic derivatives of phosphorus, arsenic, antimony, and of other elements. His first paper in the *Berichte*, on phosphorus sulphobromide, dates back to 1871, and almost his last was a long paper on organic compounds of phosphorus and nitrogen, in the *Annalen* of last year. He was successively connected with the technical high schools of Karlsruhe and of Aix-la-Chapelle, and had been for the last twenty-five years at Rostock.

THREE volumes of special reports on the mineral resources of Great Britain, prepared by the director of the Geological Survey in response to numerous inquiries that have arisen through the conditions brought about by the war, have just been published. In vol. i. the uses, distribution, treatment, and output of tungsten and manganese ores are dealt with, and particulars of the mines, active and inactive, are given. The second volume deals with the sources, uses, and treatment of barytes and witherite (the sulphate and carbonate of barium). The mines from which the minerals are or have been raised are described in detail. Vol. iii. of the series deals with the properties, uses, treatment, and modes of occurrence of gypsum, anhydrite, celestine, and strontianite. Details of the workings in all parts of Great Britain are given, with statistics as to output. Copies may be obtained through any bookseller, or from the Director-General, Ordnance Survey Office, Southampton.

ONE of the most talented and promising of our young botanists was lost to science on January 5, when Capt. A. S. Marsh, of the 8th (Service) Battalion, Somerset Light Infantry, was shot through the heart by a German sniper on the western front. We are indebted to Mr. A. G. Tansley for the following particulars of Capt. Marsh's career and work :—Marsh was born at Crewkerne in 1892, and was educated at Sexey's School at Bruton. He began residence at Trinity College, Cambridge, in 1909, took the first part of the Natural Sciences Tripos in 1911, and the second part in 1913, and was placed in the first class in both parts. In 1913, also, as a result of getting a Frank Smart studentship in botany, he migrated to Caius. Marsh demonstrated in the elementary botany and elementary biology classes at Cambridge and also in Dr. Moss's field classes. The vigour with which he devoted himself to military work, his evident success with his men, and his popularity among fellow-officers perhaps surprised some of his friends, for Marsh had seemed essentially a student. He published four botanical papers :—"Notes on the Anatomy of *Stangeria paradoxa*" (*New Phytologist*, January, 1914); "The History of the Occurrence of Azolla in the British Isles and in Europe generally" (Proc. Camb. Phil. Soc., February, 1914); "The Anatomy of some xerophilous species of Cheilanthes and Pellæa" (*Annals of Botany*, October, 1914); and "The Maritime Ecology of Holme-next-the-Sea, Norfolk" (*Journal of Ecology*, June, 1915). All his papers showed marked ability, and the most important—a study of the salt marsh near Hunstanton—is a piece of work admirably conceived and executed. Before he left Cambridge, also, he devised some ingenious experiments in competition between closely allied species of plants which in nature occupy different habitats, and these were beginning to give valuable information on the ecological relations of the species. But at the time he joined the Army, Marsh was only just beginning to "find himself" intellectually, and it is impossible to say what he would have done in science if he had lived to return to botanical work. He was very greatly loved by those who knew him best, and his death is a bitter loss to his friends.

IN *Man* for January Prof. Ashby describes the excavation of a portion of a megalithic building in Malta, known as Id-debdieba, "The Place of the Echo." Among the objects discovered were six pillars of hard coralline limestone, cylindrical in shape, but some tapering at one end, of a type common in Maltese megalithic buildings; a few flint implements; a quantity of Neolithic pottery, with other fragments showing that the site was occupied in Greek and Roman times.

IN the American *Museum Journal* for December last Mr. H. Lang describes, with a fine set of photographs, his work of exploration in the Congo valley. He points out that the result of the present war will be even more disastrous to these native races than to the peoples of Europe. The direct loss of life will be largely confined to the white officers; but the dispersal of hosts of armed native warriors when the hostilities are over will inevitably lead to a wide extension of the dreaded plague of sleeping sickness. The usual prophylactic measures have been seriously weakened as a result of the war, and there is little hope of checking the plague in the absence of a well-equipped medical service entailing enormous expenditure, for which the necessary funds cannot be provided.

THE always interesting problems on motion raised by Zeno, and continued at recurrent intervals ever since, form the text of an amusing article, "The Flying Arrow," by P. E. B. Jourdain, in *Mind* (New Series, No. 97). The shade of Zeno is represented as being conversant with all the mathematical and philosophical works, including the periodic literature, since his day, and with Socrates as his victim and auditor he analyses critically those who have wrestled with his paradox of the flying arrow. The writer's view is that all four arguments are directed against the belief that lines are made up of points. Both philosophers and mathematicians will find the article stimulating and subtly amusing.

THE twenty-ninth annual report of the Liverpool Marine Biology Committee, in addition to the usual accounts of work at the Port Erin Station, contains an address by Prof. W. A. Herdman on the life and work of Edward Forbes. Reading this vivid account of an arduous and fruitful career, the naturalist of to-day cannot but mourn the loss which biological science suffered from Forbes's early death in 1854, a few months after he had attained "the goal of his ambition, the chair of natural history at Edinburgh." Prof. Herdman's appreciation of Forbes's work is wise and generous, yet present-day students of distribution will consider that less than justice has been done to Forbes's classical Survey Memoir on the fauna and flora of the British Isles. So far from "the three southern subfloras of Forbes in place of being the oldest, as he supposed," being now known to be the most recent, the relatively high antiquity at least of Forbes's Lusitanian flora has been confirmed by much recent work on the natural history of Ireland and western Britain.

SOME interesting observations on the physiology of frogs are recorded by Messrs. A. T. Cameron and T. I. Brownlee in the *Quart. Journ. Exp. Physiol.*, vol. ix., No. 3. It is well known that frogs will endure prolonged submersion in water, efficient respiratory exchange going on through the skin. The authors find that with *Rana pipiens* in Manitoba, the average time for which the animal will live under water is sixteen days, with an observed maximum of fifty-two days. Death from too prolonged immersion is preceded by swelling, due partly to absorbed water, but largely to accumulation of absorbed nitrogen. In another paper these authors discuss the upper limit of temperature compatible with life in the frog. They had previously fixed the lower limit at approximately 1·25° C. below freezing point. They now find that *R. pipiens* cannot live for more than a few days submerged in water at 18° C., and that a few minutes' endurance of a temperature of 35° proved fatal. In damp air similar results were obtained, but the high-limit temperature requires longer to cause death. The internal temperature of the animals scarcely differs from that of the medium, and can evidently vary only within the limits mentioned if life is to be maintained.

To determine whether selection, or mutation, is the more important agency in evolution, Prof. W. Castle some time ago started a series of experiments with hooded-rats, since these afforded him the single genetic factor necessary for his investigation. A very careful analysis of the data accorded him after breeding 33,249 rats, excluding those which formed the subject of "control" experiments, seems to demonstrate clearly enough that "there is apparently no limit to the quantitative change which can be produced in the hooded pattern by selection, short of its complete extinction in the all-white, or all-black condition." This being so, then "two foundation postulates of the mutation theory are false, viz.: (1) that continuous, or graded variations, are not concerned in evolution, and (2) that selection of such variations, no matter how long continued, can effect no permanent or progressive racial changes. Selection, as an agency in evolution, must then be restored to the important place it held in Darwin's estimation, an agency capable of producing continuous and progressive racial changes." Prof. Castle states his case with remarkable lucidity in the *Scientific Monthly* for January, numerous diagrams contributing not a little to the value of this most important summary.

IN *Knowledge* for January Mr. Aubrey Drew discusses some cytological problems raised by recent cancer research. He first describes the "jelly method" of *in vitro* staining of cells, devised by H. C. Ross. An agar jelly is made, and to this sodium chloride, sodium citrate, and citric acid are added in certain proportions, and afterwards sodium bicarbonate and Unna's polychrome methylene-blue in quantities varying with the cells to be examined. For use the mixture is melted, and a drop or two placed on a slide and allowed to set. A little of the material to be examined is then placed on the jelly, covered with a cover-glass, incubated if necessary, and examined microscopically. In this way cells, such as leucocytes, can be seen dividing, and the changes in structure observed. Certain substances are found to be necessary for cell-division to take place, and are termed "auxetics," others increase cellular movements, "kinetics," and some of the latter increase the activity of auxetics and are termed "augmentors." These substances may play a part in cancer production. Thus certain auxetics and kinetics will produce tumours on injection into animals. Workers in pitch and tar are liable to be affected with cancer, but it is only gasworks pitch and not blast-furnace pitch which predisposes to cancer. By the jelly method it has been shown that gasworks pitch and tar contain both auxetics and kinetics (augmentors), but the blast-furnace products contain only traces of auxetics and no kinetics.

WE have received a copy of the list of seeds of hardy herbaceous plants and of trees and shrubs which for the most part have ripened at Kew during the past year. This annual publication, forming the first appendix of the Kew Bulletin for 1916, is a welcome sign that despite great difficulties owing to the depletion of the garden staff, the true functions of a botanic garden are being successfully carried on at Kew.

THE Journal of the Royal Horticultural Society for December, 1915, contains an interesting and very well-illustrated paper by Mr. G. Forrest on the flora of north-western Yunnan. The plates are from Mr. Forrest's own photographs, and include remarkably beautiful studies of several of the peculiar species of Primula found in this region. The Rhododendrons are also represented by numerous species, several being dwarf alpines, which form regular "heaths." Of these *R. prostratum* grows up to an altitude of 16,000 ft. Many of the Rhododendrons were found on pure limestone rocks, but whether they are really growing with their roots in the limestone rocks or in pockets of humus was not definitely determined.

COCONUT cultivation, though still a small industry in Queensland, is rapidly extending. Hitherto it had been supposed that copra from Queensland coconuts did not contain enough oil to be of commercial value, but the examination of a sample of copra from these nuts at the Imperial Institute has now established that the oil content is normal and the copra of good quality, and brokers state that shipments would be readily saleable in this country at good prices. Before the war the bulk of the copra shipped to Europe from Ceylon, India, and elsewhere was crushed in Germany and France. Urgent representations on this subject were made by the Imperial Institute on the outbreak of war to the oil-seed crushing firms in the United Kingdom, some of which have now begun to work copra, with the result that there is a new and good market for the product in this country, which is likely to expand when the new factories now building start work.

STUDENTS of petrography will note the description of three Indian meteorites by J. Coggin Brown ("Records Geol. Surv. India," vol. xlv., 1915, p. 209), the falls of which were actually observed between 1902 and 1914. All are referable to the prevalent sporadosiderite type, and show marked chondritic structure.

A SECOND edition of "The Geology of the Country between Whitby and Scarborough" has been issued by the Geological Survey of Great Britain (1915, price 2*s*. 6*d*.). It is practically a new work, and the description of the strata by the late C. Fox-Strangways and G. Barrow has been supplemented by a chapter by S. S. Buckman on their palæontological classification. The critical revision of the species and genera of ammonites will be very welcome to those who first examined the Whitby coast when far less exactitude prevailed. Considering how many visitors to this part of Yorkshire become here attracted for the first time to geology, we might suggest the insertion in a third edition of plates showing some of the most common forms, and the suture-lines that can be traced on rubbing down the surface of good specimens. Popular works on the Whitby district are obtainable, such as that by L. Walmsley (NATURE, vol. xciii., p. 382); but the Geological Survey is not sufficiently recognised as a powerful help in public education. The present memoir is further strengthened by a review of the glacial geology by G. W. Lamplugh.

NEARLY two years have elapsed since the circumstances of the loss of the *Karluk*, the ship of Stefansson's Arctic Expedition, were announced, but a full account of her voyage and her drift in the pack, and the escape of her crew after the sinking of the vessel, have so far been lacking. Captain R. A. Bartlett's diary from his departure from Nome to his return to Esquimalt is now published in full in the report of the Department of the Naval Service for the year ending March 31, 1915 (Ottawa). It is accompanied by a sketch map showing the drift of the *Karluk* from near Flaxman Island, where she was caught on August 12, to her destruction on January 11, north of Herald Island. The diary is characteristically brief, but it shows with what ability Captain Bartlett was prepared to handle the situation. Had all the members of the expedition taken his advice, there would probably have been no loss of life. Captain Bartlett wisely decided to bivouac on the ice for several weeks in order to harden the men and to get a track made over the rough ice by the time the light conditions improved. A road was prepared and depôts of provisions laid down, with the result that Captain Bartlett's party reached Wrangell Island in safety. How Captain Bartlett crossed to the mainland and ultimately returned from Nome with help has been told before. Unfortunately, there is now no hope of the safety of Dr. Forbes Mackay, Mr. James Murray, M. Henri Beuchat, and those members of the crew who accompanied them in their independent attempt to reach the land at an earlier date.

THE council of the Röntgen Society has drawn up and issued with the January number of the journal of the society a number of recommendations for the protection of X-ray operators. They are printed on a card, which should be suspended in a prominent position in every X-ray laboratory. In the early days of the therapeutic use of the rays many cases of X-ray dermatitis occurred, but these injurious effects may now be readily avoided. The X-ray bulb should be enclosed in a box lined with sheet lead two millimetres thick, and provided with an opening through which alone the rays required can emerge. The observer should protect himself with sheet lead of the same thickness, or with gloves or lead glass screens with an equivalent amount of lead in them. The efficiency of each screen should be tested before it is brought into use.

THE director of the Bureau of Standards at Washington gives a short account of the recent work done by the bureau in the January number of the Journal of the Franklin Institute. We have already given in these columns the results of the inquiry into the cause of the failure of fusible tin boiler plugs, and the investigation of the permissible variations in the method of manufacturing bronzes. Amongst the other subjects under investigation at the present time are:—The best platinum alloy for platinum ware, the causes of failure of wheels, rails, and other railway materials, the standardisation of test steel ingots, the distribution of the carbon in steels, the preparation of pure iron, the manufacture and properties of non-ferrous metals and alloys, and the causes of failure of structural brasses. It is impossible to read a list of investigations like this without feeling that the United States Government is providing a sound scientific basis for her industries, and that the money required for maintaining the bureau is well spent, or, we should prefer to say, well invested.

"SELLING Machinery by Motion Pictures" is the title of an article in the *Engineering Magazine* for January. Machines are generally too large to be sent for inspection by the prospective customer, and experience shows that it is very difficult to persuade him to visit the works where the machines are made. Many firms are now making a speciality of portable kinematographs, light in weight, small in size, and easy to operate. These can be connected to the lighting circuit in the customer's office with a blank wall as the screen, and the films show the mode of operation and construction of the machine in an ideal manner from the business point of view. The motion picture obliterates the seasons, and the action of a harvester can be shown in winter as easily as that of a planter in autumn. The article gives many instances of the use of the kinematograph for business purposes, and includes copies from parts of several typical films.

THE use of dry blast in the manufacture of iron and steel is discussed in *Engineering* for February 11. At least five plants have been installed in Great Britain; most of these have not been considered to yield a sufficient return for the outlay involved. Two plants erected in Germany were shut down after twelve months' running. On the other hand, the installation at the works of Messrs. Guest, Keen, and Nettlefolds, Cardiff, shows a saving in fuel of 13·4 to 18·4 per cent. Most of the American plants have effected notable economies, varying from 10 per cent. saving in fuel and 12 per cent. increase in output, up to 20 per cent. saving and 20 per cent. increase. The explanation of these divergent results is to be found either in the variation in local conditions, or in differences of practice. In practice refrigeration is the system almost universally used. The desiccation of the blast by calcium chloride, which is the only alternative, is less costly as regards initial outlay, but it is probable that the running costs would be much higher. Typical refrigerating plants are described in the article.

OUR ASTRONOMICAL COLUMN.

COMET 1915*e* (TAYLOR).—The following preliminary elliptic orbit has been calculated by F. J. Neubauer and H. M. Jeffers, of the Berkeley Astronomical Department (Lick Observatory Bulletin No. 276):—Perihelion, 1916, January 27·906 G.M.T., $\omega=342^\circ\ 54'$, ☊$=114^\circ\ 52'$, $i=14^\circ\ 30'$, $\log a=0{\cdot}48282$, period 5·299 years.

The Copenhagen ephemeris for this comet proves to represent its positions very accurately. The large corrections given in this column on January 27 were in error; actually the differences were insignificant. An observation made at Bergedorf on February 1, and forwarded by Prof. E. Strömgren, shows that the corrections then required were only -3s. in R.A. and $0'$ in declination.

SECONDARY NUCLEI OF COMET 1915*a* (MELLISH).—A series of photographs taken with the Franklin-Adams star camera at Johannesburg are reproduced in Circular No. 31 of the Union Observatory. The subsidiary nuclei were found to lie on a line almost tangential to the coma and not axially. On June 10 the brightest secondary was 82″ distant, and another about 154″. The line joining these nuclei was in position angle, 228·8°. Other measures of the nuclei are given by Mr. Melotte in the *Observatory* for January.

ON THE MEAN DISTANCES AND LUMINOSITIES OF STARS OF DIFFERENT SPECTRAL TYPES.—Prof. C. V. L. Charlier has investigated statistically (*Meddelande*, Lunds Astronomical Observatory) the mean parallax of stars according to spectral type in relation to mean distances and luminosities for all stars down to mag. 6·0. It is found that the β stars deviate only slightly from the mean absolute magnitudes of these stars, whereas the K—and still more the M—stars are characterised by great fluctuations about their mean absolute magnitudes.

ANOMALOUS DISPERSION IN THE SUN.—The suggestion advanced by Julius that anomalous dispersion could be the cause of small alteration in wave-length of neighbouring Fraunhoferic lines was followed by a notable research leading to confirmatory results (NATURE, September 2, 1915). This work is now sharply criticised by Mr. Evershed in a letter to the January number of the *Observatory*, and by Dr. Royds (Kodaikanal Observatory Bulletin, No. xlviii.) Small wave-length shifts between sun and laboratory sources have been the subject of much minute investigation at Kodaikanal during the past few years by direct measurement on large-scale spectrograms, and data derived from these studies now enable Dr. Royds to state that when the actual sun-minus-arc displacements are substituted for Albrecht's residuals the relative shift between the two groups of solar lines having a close companion on one side or the other is too small to establish anomalous dispersion in the sun. Evershed considers the case of close solar doubles. The effect of anomalous dispersion should be to increase the separation to a measurable degree as compared with the arc, but this is not found to be the case. Nevertheless it is recognised that it is difficult to explain away the grouping according to sign of the residuals in Albrecht's investigation.

BRITISH PRODUCTION OF SYNTHETIC DYES.

IN the *Times* of February 11 a Leeds correspondent comments on current developments of the problem of increasing the production of synthetic dyes. Whatever criticisms may be advanced against the Government scheme, it cannot be denied that the appointment of Prof. W. H. Perkin, the eldest son of the discoverer of mauve or aniline purple, to be head of the research department of British Dyes, Limited, is a most welcome augury of future progress. It is, however, a debatable point whether this department, endowed by the State to the extent of 100,000*l.*, ought in the public interest to be the monopoly of a single company, which under a new name and with the aid of a large Government subsidy is carrying on the business of one only of several competing firms.

The burning question of a year ago as to the desirability or otherwise of having chemists on the directorate of a colour works has now received a striking practical illustration in the less advertised developments recently effected in the firm of Messrs. Levinstein, Limited, of Blackley, near Manchester. In accordance with the best traditions of the Manchester school of economics, this firm of colour-makers, which practises the doctrine of self-help, has made very considerable extensions of its old-established works under the skilled guidance of their director, Dr. H. Levinstein, a college-trained chemist, a double graduate in science of the Universities of Manchester and Zürich, and a former pupil of Profs. Bamberger and W. H. Perkin. Without extraneous help, the Manchester firm has now to compete for home and foreign trade and for scientific assistance against a commercial rival enjoying preferential treatment from the State. It is obvious that the latter firm anticipates a further extension of favours from the Government, otherwise it would not be practicable to develop so large an area as a 250-acre site with the existing capital and with the comparatively small sum paid up by shareholders who are dye-users. A continuance of this policy of subsidies to one firm will handicap still further the meritorious efforts now being made by other less favoured undertakings.

The research work on dye production carried out in the dyeing department of the University of Leeds, under the auspices of the Board of Trade, by Profs. Green and A. G. Perkin and Dr. Oesch, formerly of the Berlin Aniline Company, is of the utmost importance in regard to the progress of the dye industry in this country. But if the effort to recover our lost supremacy in dyes is to be truly national the benefits of this university research should, at least to some extent, be at the disposal of other dye-producing works besides the exceptionally favoured successors of the old Huddersfield firm.